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Have Capital Markets Aided Growth in China and India?

Financing to the private sector in China and India has expanded much less than aggregate measures of financial depth suggest

Among the most notable developments in the global economy over the past 20 years has been the rise of China and India as world economic powers. Along with high overall growth in these economies has come an increase in their financial activity. But how much have different types of firms used capital markets and benefited from their expansion?

Didier and Schmukler study this question in a new paper by assembling a unique and comprehensive data set on domestic and international capital raising activity and the performance of the publicly listed Chinese and Indian firms. They compile transaction-level information on equity and bond issues, then match these data with annual firm-level balance sheet information. Their matched data cover 2,458 firms in China and 4,305 in India.

The authors show that the expansion of financing to the private sector in China and India has been much more subdued than the aggregate measures of financial depth suggest. Although capital raising activity in equity and bond markets expanded substantially in 2005–10, it remained relatively small. Importantly, this expansion was not associated with widespread use of capital markets by firms. For example, while the amount of capital raised through equity issues in domestic markets in China doubled (from 0.5 to 1 percent of GDP a year)

between 2000–04 and 2005–10, the number of firms using these markets to raise capital per year increased by only 20 percent (from 87 to 105 among 1,621 listed firms). Similar patterns, though on a smaller scale, apply to the use of foreign markets.

Not only have few firms made recurrent use of equity and bond markets; even fewer firms have captured the bulk of the capital market financing. For example, the top 10 firms in China and India captured between 43 and 62 percent of the amount raised in 2005–10. Thus the authors' findings suggest that capital markets have not been a significant source of financing across firms. This contrasts with the perception in the literature that equity markets in the two countries, particularly in India, are relatively well developed.

The authors also show that firms that use equity or bond markets are very different from—and behave differently than—those that do not do so. While nonissuing firms in both China and India grew at about the same rate as the overall economy, issuing firms grew twice as fast in 2004–11. Indeed, firms that raise capital through equity or bonds are typically larger than nonissuing firms initially and become even larger after raising capital. Firms grow faster the year before and the year in which they raise capital. Moreover, firms that use capital markets have ex ante a longer liability maturity structure and more capital expenditures, and the differences relative to the firms that do not use capital markets

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Land and Poverty: The Importance of Transparency

Greater transparency and accountability in land policies are critical to reducing poverty and inequality and promoting growth

With more than 900 participants from 92 countries presenting some 250 papers, the 2013 Annual World Bank Conference on Land and Poverty scaled new heights in participation. The conference demonstrated how convening a wide range of stakeholders can generate synergies to enhance impact. A few examples of research presented at the event show the possibilities for putting issues that were traditionally thought of as being too politically fraught and too technically complex on a more rational footing—and thus helping to promote transparency and accountability, foster dialogue at the country level, and build local capacity for an evidence-based policy dialogue.

Large-scale land acquisition. Papers showed that the first wave of large investments in Africa often failed to fully realize the opportunities to improve productivity and generate local benefits. To improve outcomes, better evidence and greater collaboration between public and private actors are needed. A new generation of impact evaluations of new business models and contractual arrangements directly with investors are emerging, to provide evidence on the most effective approaches under different conditions.

Urbanization. The nature of land rights and the way in which governments exercise eminent domain will have far-reaching implications for urbanization processes and urban shape as well as for the ability to deliver services and make much-needed public infrastructure investments. Yet with urban land often a major source of rent, these raise important political economy issues. Conference participants discussed innovative approaches to overcoming these, including in land use planning and collecting land tax so as to avoid informality and promote fiscal

independence by local governments. This discussion was complemented by examples of responses to high demand for greater tenure security in informal urban settlements in Brazil, China, Ethiopia, India, Indonesia, Nigeria, the Philippines, and Tanzania.

Service delivery. With land registries and land-related institutions continually ranking high on international measures of corruption, new technology to make information more widely accessible can be a major force in improving transparency and quality in service delivery. It can also allow civil society groups to help individuals or communities get basic formal recognition, to be expanded on as needed. Papers presented examples showing how the greater transparency in service delivery created by such technology enabled women and disadvantaged people to take full advantage of their assets for social and economic empowerment. Although use of land as collateral is not feasible everywhere, there are situations in which it can promote financial sector development and particularly housing construction.

Postconflict reconstruction. Reconstruction efforts in postconflict settings provide a unique opportunity for addressing issues of land access and land use, including how to deal with refugees and displaced people and handle loss of land ownership documentation without fostering land grabbing. But this opportunity is easily missed and conditions may be created that foster nontransparent deals—rather than promoting justice and reconciliation and attracting investment that can provide opportunities for local people to move out of poverty. Once the window of opportunity has closed, it is very difficult to catch up, and land often becomes a new trigger of conflict.

Climate change. Efforts to reduce emissions from land use decisions, which can contribute substantially to global emissions, have moved high up on the global agenda. Yet unclear land tenure arrangements may undermine the impact of such initiatives. Legal initiatives and use of innovative

technology to recognize and map forestland and to monitor deforestation can have an important impact at the local level, while better links to land tenure information can improve the effectiveness of interventions to measure and predict such changes. These new approaches can improve land use by identifying unused land and using mechanisms (including payments for ecosystem services) to bring it to better uses and, in doing so, enhance transparency and accountability and reduce inequality.

Land governance. Together with the Bank's regional departments and other partners, the Development Economics Senior Vice Presidency (DEC) has been developing the Land Governance Assessment as a diagnostic tool to operationalize global standards. This tool has been applied or is being implemented in some 30 countries, and results were presented, generating significant interest. Countries now build on these results to establish multistakeholder platforms to design country-specific strategies and ways to monitor progress.

The greater recognition of the importance of land issues at the global level—including a G8 initiative on land transparency that was announced at the event—calls for ways to focus the discussion, generate a constituency for change, and develop monitoring indicators at the country level. And it implies a need to strengthen country capacity for regular monitoring and impact evaluation, increase the transparency of land-related investment, and design and assess the impact of sustainable models to record land rights. Together with the many partners contributing to the conference, DEC is committed to pursue these goals and, in doing so, to build capacity, foster debate, and implement policies and programs to address land issues in a way that is equitable, gender sensitive, and growth promoting.

More information can be found at <http://econ.worldbank.org/landconference2013>.

Coping with \$100 Oil

Using sectoral subsidies to keep prices low is generally suboptimal. Other means can be more efficient and less distorting

Between 2003 and 2012 the average annual world prices of gasoline, diesel, and kerosene in 160 countries more than doubled, while cooking gas prices increased by two-thirds (with prices converted to local currency units and adjusted for domestic inflation). Unable to cope with steadily climbing world oil prices, many developing countries have made little progress in reforming the pricing of oil products. End-user prices of oil products vary across countries by more than a factor of 100.

These large price variations point to the prevalence of continuing government influence on domestic fuel prices. Governments use a range of policies to keep domestic prices low, including setting prices or price ceilings, providing price subsidies, establishing a mechanism for smoothing prices, reducing taxes, requiring oil companies to bear some or all subsidy costs, and imposing export restrictions. A recent study by Kojima shows that in the past three years two-fifths of the 65 developing countries examined have frozen the retail prices of gasoline, diesel, or both for months or even years at a time.

More generally, about two-thirds of the study countries have kept domestic prices below market-based levels for one or more fuels, subsidizing consumers. In every case the government pays directly or indirectly—through budgetary transfers, tax expenditures, or lower corporate tax collection due to financial losses suffered by oil companies. Many countries have universal price subsidies, which are widely acknowledged to be regressive. Quite a few have subsidies targeting certain consumer categories; those targeting the poor are rare. By compensating one or more consumer categories through price adjustments rather than through other forms of assistance,

these pricing policies also distort the downstream oil market.

On paper, a price smoothing scheme can be self-financing: in times of low world prices, consumers pay more and the savings are put aside; in times of high world prices, the savings are drawn down to reimburse the oil marketers to keep prices low. In practice, however, most price smoothing schemes build up deficits over time, eventually requiring budgetary transfers or large loans. The budgetary transfers can run into billions of dollars, as in Colombia and Peru.

Targeted subsidies for oil products have large leakages because liquid fuels are easy to store and transport. Differentiating prices for the same or similar oil products by user category creates powerful financial incentives to divert lower-priced fuels to users who are not eligible for the price discounts. Typical recipients of such targeted price subsidies are households, transport operators, farmers, and fishermen. Many governments price kerosene below diesel in the name of protecting households that use kerosene for cooking, lighting, and heating. Kerosene, however, is well suited for adulterating diesel. The larger the price difference, the greater is the financial incentive to divert kerosene to the automotive diesel sector. Chemical marking, color dyes, and other detection measures can curb diversion to a degree, but people will find ways to get around the detection system. Also common is the diversion to commercial establishments of subsidized cooking gas sold in small cylinders for households. These criminal activities worsen governance in the downstream oil sector, making sector reforms difficult.

Fuel shortages—and flourishing black markets with higher prices—are common in markets with low official prices. Shortages occur because of

diversion and smuggling and because of the government's inability or unwillingness to reimburse oil companies for subsidies. Cash-strapped oil companies may cut back on refining and imports, and even shut down filling stations if losses become unsustainably large. Subsidies may be channeled through state-owned oil companies, granting them a monopoly or near-monopoly status. Not having to face competition, they become opaque and inefficient, raising costs.

Given the weight of evidence, governments should pursue policies to make the downstream oil sector competitive as well as deregulate the sector

stream oil sector competitive as well as deregulate the sector, achieving the objectives of price controls through means other than exercising control over pricing and fuel allocation. For the purpose of helping the poor cope with high oil prices, the long-term goal should be to replace fuel price subsidies with effective social service delivery. Arguably, the most efficient and least distorting approach is to transfer cash as part of an integrated, comprehensive poverty alleviation program; government interventions to keep prices low for each good and service through sectoral subsidies are generally suboptimal. In parallel, to reduce vulnerability to oil price volatility, governments should promote energy conservation measures throughout the economy and facilitate fuel diversification to reduce overreliance on oil where it makes economic sense.

Masami Kojima. 2013. "Petroleum Product Pricing and Complementary Policies: Experience of 65 Developing Countries since 2009." Policy Research Working Paper 6396, World Bank, Washington, DC.

How Fit Are Feed-In Tariff Policies?

When using feed-in tariffs for renewable energy, governments can use complementary policies to get more bang for their buck

Countries around the world have used various incentive programs to accelerate the deployment of renewable energy. These range from direct subsidies or tax incentives to market-share mandates implemented with tradable credits to competitive bidding. But the most popular support program is the feed-in tariff.

Under a feed-in tariff policy, governments set prices—often at a premium—for different types of renewable power to compensate producers for the higher cost of producing clean energy. Utilities are required to purchase power from renewable resources at this price, but can either spread the additional costs across their entire customer base or receive compensation from the government to recover the incremental costs. Feed-in tariffs essentially work as subsidies to renewable energy sources to make them cost-competitive with fossil-fuel-based technologies.

Feed-in tariffs have for the most part been viewed as successful in terms of deployment: by some estimates they are responsible for about 75 percent of global solar photovoltaic and 45 percent of global wind capacity. But their record in cost-effectiveness is less consistent. In many countries the cost effects of feed-in tariff policies have become a primary concern for policy makers. Whether the costs are recovered from ratepayers or taxpayers, rising costs can create both political and economic pressures. Households in developing countries are particularly vulnerable to rising tariffs because energy consumes a larger share of their incomes than for households in developed countries.

Reliable empirical studies on the cost-effectiveness of feed-in tariffs are sparse, in part because of the complexity and variety of the policies as implemented and the lack of comparable

data across countries. A new paper by Zhang attempts to rectify the problem by reviewing the detailed design features of wind feed-in tariffs in 35 European countries during 1991–2010 and matching them with generator-level wind installation data. Using the new data set, the author estimates the responsiveness of wind deployment to different levels of feed-in support. The empirical analysis helps to identify policy design features that are more cost-effective in stimulating renewable investment.

A critical issue affecting the analysis is how to infer the causal link between investments and incentives. Countries with poorer wind conditions are more likely to provide higher incentives to make wind cost-competitive. There could also be feedback from past investment to current values of feed-in tariff support because tariffs may be revised downward as capacity expands and installation costs fall. The author uses various econometric techniques, including instrumental variables, to address the potential endogeneity of feed-in tariff rates.

Based on a series of statistical tests, the author finds that higher subsidies have not necessarily yielded greater levels of renewable installation. Three factors could explain this weak correlation. First, countries providing high subsidies may lack the necessary institutional and regulatory environment to attract investment and may have failed to scale up investment because of this noneconomic barrier.

Second, overly generous subsidies may have provided rent-seeking opportunities as suppliers along the value chain push up system costs in order to take a share of excess remuneration. In this case higher feed-in tariffs are correlated with higher system costs, which in turn inhibit the ability of the industry to expand renewable capacity.

Third, the results show that higher feed-in tariffs are negatively correlated with the wind capacity factor, indicating that high remuneration may have allowed investment in high-cost sites such as those with low wind speed.

Since wind investment is negatively correlated with investment cost (in euros per megawatt-hour), high subsidies again result in a weaker investment response.

But the results also show that contract duration and interconnection guarantees (both technical and legal) for renewable electricity are important determinants of the “shadow price” of feed-in support—extending a five-year agreement by one year increases annual wind investment by 6 percentage points on average, while providing guaranteed grid access almost doubles wind investment in one year. Because both parameters are crucial to investor confidence in long-term market security, the results suggest that policy certainty is at least as important as short-run financial incentives in attracting private participation.

Finally, the analysis shows that the design of the overall electricity market matters. A competitive market tends to be more conducive to renewable deployment. One possible explanation is that wholesale competition raises the upside potential of renewable investments because many countries allow renewable generators to sell directly in the open exchange. This enables renewable developers to benefit from higher market prices, especially during the peak demand period.

Overall, the experience of wind development in Europe suggests great potential for improving the cost-effectiveness of feed-in tariff policies. While the level of subsidy is a poor predictor of deployment, governments can attract investment by providing favorable grid access conditions, investment stability guaranteed by a long-term feed-in tariff contract, and low administrative and regulatory barriers.

Fan Zhang. 2013. “How Fit Are Feed-In Tariff Policies? Evidence from the European Wind Market.” Policy Research Working Paper 6376, World Bank, Washington, DC.

Political Incentives to Underinvest in Pro-poor Policies

Politics can undermine pro-poor service delivery. Understanding why can help in building better institutions for accountability

Vote buying, the direct exchange of gifts or money for political support at the time of elections, is widespread in many developing countries. Much is known about vote buying as a political strategy, and there is a common view that such political practices can undermine democratic principles. But an important question remains open: Are there any consequences for public policy performance when governments gain or lose office in elections with widespread vote buying? Where politicians have to woo demanding voters, do the inducements they offer to win political support include not only gifts during elections but public services between elections?

A new paper by Khemani provides direct empirical evidence, for the first time, that where vote buying practices are more prevalent, governments invest less in pro-poor services. That is, political incentives matter significantly for the delivery of services.

This evidence was generated by taking advantage of an institutional context that is increasingly common among developing countries—the decentralized delivery of basic public services that are used largely by poor people, such as in health, education, and infrastructure. The data come from the primary health sector in the Philippines, where directly elected municipal governments are responsible for delivering basic maternal and child health services to villages within their jurisdiction. Municipalities hire and manage nurses, midwives, and community or village health workers, the key health personnel responsible for delivering services to poor people.

The author's central finding is that in places where households report greater vote buying (in direct response to questions about offers of money in exchange for votes at the time of

elections), municipal government records show lower investment in basic health services—a smaller share of spending allocated to health and fewer village health workers and health projects. Strikingly, in places with greater vote buying, a larger share of children are severely underweight, possibly a summary consequence of underinvestment in pro-poor services.

The data collection was designed to allow testing and interpretation of these correlations as driven by institutions of “clientelist” politics. Where underlying conditions are conducive to the use of vote buying or clientelist strategies, the politicians who win office are likely to use fewer public resources for delivering broadly pro-poor public services and to perform worse in carrying out this function. To measure possibly idiosyncratic variation in vote buying practices at disaggregated levels, whose correlation with health services is not attributable to any channel outside clientelism, the research surveyed 30 municipalities in one province (Isabela) in 2010, a few months before local elections. Several alternative explanations were tested, such as that greater poverty drives both greater vote buying practices and poorer health outcomes, leading to a spurious correlation between the two. The data do not support such alternatives.

Other types of services—infrastructure projects and targeted assistance to households in time of need—serve as revealing comparators. They are relatively more “targetable” than health services and therefore more compatible with clientelist political strategies than broadly delivered services. They have also been described as amenable to elite and political capture. The data show a positive, though not statistically significant, correlation of vote buying with targeted assistance to households and with mayoral road projects in the sampled villages (in contrast with the negative correlation with health services). That is, vote buying is robustly correlated with lower levels of a particular type of service having

the following characteristics: being pro-poor (wealthier quintiles tend not to use the health services that municipalities provide) and being a broadly delivered service that is (relatively) less amenable to narrow targeting.

Why is vote buying associated with weak political incentives to serve the poor? One answer worthy of future investigation revolves around the quality of politicians. Once vote buying or clientelism has emerged as an effective political strategy, for whatever reasons (including historical ones), it can shape who wants to become a politician and why. The practice can encourage the emergence of low-quality contenders who invest in building political support on the basis of vote buying, or even violence, so that once in power they can get away with poor performance and the extraction of high rents from public office.

Micro-empirical research suggests that in developing democracies political institutions are dynamic rather than ossified into bad equilibriums. For example, political competition has become decentralized, reducing barriers to entry for would-be contenders and generating variation in the quality of politicians and the platforms of competition. The aspiration of local leaders to higher national office can improve the trade-off they face between good leadership and rent extraction from public resources. A rigorous understanding of political incentives could help in better designing available instruments for institution building—such as transparency, citizen organization, and performance-based grants to local governments—helping to nudge these away from clientelism and toward the broad public interest.

Stuti Khemani. 2013. “Buying Votes vs. Supplying Public Services: Political Incentives to Underinvest in Pro-poor Policies.” Policy Research Working Paper 6339, World Bank, Washington, DC.

Mass Media and Public Policy for Agriculture

As economies grow, policy typically shifts from taxing to subsidizing agriculture. Mass media can have a moderating effect

Mass media plays a crucial role in distributing information and in shaping public policy. Theory shows that information provided by the mass media reflects its incentives to provide news to different groups in a society and in turn shapes the influence of these groups on policy making.

Media coverage affects the efficiency with which politicians reach different groups with their campaign promises. If a political party promises support to voters who receive less news coverage, only a fraction of these voters will be aware of it. A spending promise to this group therefore will not win many votes. But if the party were to make a similar promise to a group that attracts substantial media coverage (for example, because the group forms a large audience or because it is more valuable to advertisers), this will lead to a stronger voter response. The result is that policies will be more favorable to the second group.

A new paper by Olper and Swinnen explores what this means for agricultural policy. A stylized fact about agricultural policy is the so-called development paradox, the policy switch from taxation to subsidization of agriculture with economic development. The classic interpretation of this pattern is that the political equilibrium changes when a country becomes rich because the rural-urban income gap increases, it becomes less costly to subsidize agriculture, and agricultural interests become more effective in collective action.

Mass media has an impact on this equilibrium. Government transfers are biased toward larger groups because of scale economies in the media. Because the share of farmers is larger in poor countries, mass media competition has a different effect on agricultural

policy in poor countries than in richer ones. In particular, while mass media competition is predicted to reduce agricultural protection in rich countries, it is expected to increase protection (or reduce taxation) in poor ones.

Another prediction is that government transfers will be biased toward richer groups because they are more attractive to advertisers. The impact for agricultural protection is small in (very) poor countries, where rural and urban incomes are similar, and negative in rich and emerging market economies, where urban incomes are higher than rural incomes. This effect can be reinforced by an uneven spread of mass media (such as television) between urban and rural areas. In very poor countries the diffusion of television in both urban and rural areas is low. As economies grow, the diffusion in urban areas increases relative to that in rural areas, with the gap narrowing at high income levels.

This leads to two hypotheses: that given the changing role of the agricultural sector due to economic development, the impact of mass media competition on agricultural policy will differ between poor and rich countries, all else being equal; and that this effect is contrary to the so-called development paradox of agricultural policy. Thus the traditional change in agricultural policy from taxation to subsidization associated with economic development will be mitigated in the presence of mass media competition. The authors hypothesize that this is due to a combination of the group size effect, with larger groups being more attractive to the media, and the advertiser value effect, with richer groups being more attractive audiences for the media.

To empirically test these predictions, the authors use a new World Bank data set on taxation and subsidization of farmers and food consumers

in 69 countries since 1960. Their analysis looks at both cross-country and time-series variation in the data.

The authors' empirical results are consistent with the theoretical hypothesis that public support for agriculture is affected by the mass media. In particular, an increase in media penetration is correlated with a reduction in agricultural taxation in poor countries and a reduction in agricultural subsidies in rich ones. These results are robust to the use of different indicators of agricultural policies, different media variables, different control variables, and different estimation techniques.

The authors' findings contribute to a growing body of evidence suggesting that a free and independent media is key to efficient public policies. Previous studies suggest that a more informed and politically active electorate increases the incentives for a government to be responsive and that the mass media reduces the power of special-interest lobbies relative to unorganized interests. The results are consistent with the argument that an increase in media (television) diffusion is associated with policies that benefit the majority to a greater extent (that is, a reduction in the taxation of farmers in poor countries and a reduction in the subsidization of farmers in rich countries) and that increased competition in commercial media contributes to more efficient public policies by reducing transfers to special-interest groups.

An increase in media penetration is correlated with a reduction in agricultural taxation in poor countries and a reduction in agricultural subsidies in rich ones

Alessandro Olper and Johan Swinnen. 2013. "Mass Media and Public Policy: Global Evidence from Agricultural Policies." Policy Research Working Paper 6362, World Bank, Washington, DC.

Managing Public Debt in Small States

Public debt management should be a priority for small states. But assessments of their performance reveal a different story

Arguments in favor of sound public debt management are compelling. Empirical evidence supports the view that the higher the quality of a country's policies and institutions, the better is its capacity to carry debt and withstand exogenous shocks. Public debt management is particularly important for small states (defined as having a population of less than 2 million). Small states face circumstances that expose their economies to broader risks—limited economic opportunities, lack of diversity, disproportionately high infrastructure and transaction costs, and high vulnerability to natural disasters—all of which may heighten the risk of significant and rapidly worsening macroeconomic and debt crises.

Yet most small states have only rudimentary public debt management functions, practices, and systems, a new paper by Prasad, Pollock, and Li finds. This finding is based on the results of Debt Management Performance Assessments (DeMPAs) conducted between 2007 and 2012 in 17 of the 35 small states classified by the World Bank as low or middle income. The DeMPA tool measures strengths and weaknesses in public debt management through a comprehensive and objective set of 35 debt performance indicators that cover core areas of public debt management: governance and strategy development, coordination with fiscal and monetary policy, policies and procedures for borrowing, cash flow forecasting and cash management, operational risk, and debt recording and reporting. More than half the small states in the sample (53 percent) met the minimum requirements for fewer than 10 of the 35 indicators, well below the comparable scores for the other developing countries that were assessed. And none of the small states in the sample met the

minimum requirements for more than 20 of the indicators.

Small states, regardless of income level or geographic location, were found to have strikingly similar public debt management capacity. Although it was expected that higher per capita income might be associated with better policies and more robust institutional capacity, this turned out not to be the case; states classified as low income exhibited somewhat better debt management performance. Among those that issued debt, the capacity to manage domestic debt was more robust than the capacity to manage external debt, though most small states relied much more on external sources of financing, on average, than on domestic markets.

Compared with other developing countries, small states scored well on coordination of debt management with fiscal and monetary policy. This includes rules on access to funds from central banks through ceilings and tenors. Small states frequently had a legal framework to govern public borrowing in place as well as relatively strong procedures for borrowing in domestic markets, though they typically made only limited use of market-based mechanisms to issue domestic debt.

A critical deficiency revealed by the DeMPAs was the widespread lack of capacity in small states to monitor and assess the cost-effectiveness of external borrowing terms and conditions. Coupled with poor mechanisms for debt reporting and the almost total absence of internal and external auditing of debt management activities, this was worrisome. The assessments also showed that most small states did not formulate and publish a debt management strategy.

There is no evidence in the literature to suggest that debt management practices that work in large states will not work equally well in small ones.

The fact that small states have already demonstrated their ability to perform well in some dimensions of debt management bears this out. Small states, because of their size and other features, may face institutional and human resource constraints. But small

size also brings with it some advantages. When only a limited number of institutions and staff are engaged in debt management, this greatly simplifies the process of coordination between the different elements of debt management and fiscal and monetary policy. In addition, small states typically have public

debt portfolios that are made up of a limited number of instruments and are therefore relatively easy to monitor.

The authors identify several practical steps that small states can take to improve debt management capacity. Most are relatively simple but likely to have a rapid payoff. They include benefiting from the experience of other developing countries; tackling the easiest problems first (that is, picking the low-hanging fruit, especially capitalizing on the capacity to coordinate with fiscal and monetary policy); maximizing gains from information technology; realizing full benefits from staff training; pooling resources and reducing costs through regional cooperation in preparing debt reports and manuals; and lowering currency risk and developing domestic debt markets.

Small states can improve debt management capacity by taking practical steps that are relatively simple but likely to have a rapid payoff

become more accentuated ex post. Notably, all the differences between users and nonusers are associated with the probability of raising capital.

The evidence on firm size and growth has important implications for the firm size distribution of listed firms. Quantile regressions show that the distribution of issuing firms is tilted to the right and shifts more over time than the distribution of nonissuing firms, suggesting no convergence in firm size; if anything, the distributions seem to diverge.

The findings suggest that finance matters, but in more nuanced ways than previously thought. Even though the financial markets in China and India arguably are not yet fully developed, the firms that are able to raise capital do appear to benefit from it, particularly in their overall expansion. In other words, at least part of the high growth in these countries seems to come from the firms that are able to raise new funds from the markets.

Moreover, the findings suggest that even large firms appear to be partly financially constrained. The difference in performance observed between users and nonusers of capital market financing suggests that for the group of publicly listed firms that issue securities, performance is sensitive to the external capital raised. That firms perform differently and expand when they raise capital also implies that they had investment opportunities ex ante that they could not realize. While the

authors show that capital raising activity is related to changes in firm dynamics, they do not analyze to what extent the effects are driven by the supply side (capital markets) or the demand side (firms). Doing so requires further research.

In recent decades many emerging economies have undertaken large efforts to increase the scope and depth of their capital markets and to liberalize their financial sectors as a way to complete and increase the provision of financial services. But expanding capital markets might tend to directly benefit the largest firms—those able to reach some minimum threshold size for issuance. More widespread direct and indirect effects are more difficult to elucidate.

Tatiana Didier and Sergio L. Schmukler. 2013. "The Financing and Growth of Firms in China and India: Evidence from Capital Markets." Policy Research Working Paper 6401, World Bank, Washington, DC. Also forthcoming in *Journal of International Money and Finance*.

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